



# MAYOR & COUNCIL MEMORANDUM

June 15, 2010

Subject: **Tucson Water Service Area Policy  
(City-Wide and Outside City)**

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**Issue** – At the April 13, 2010 Study Session, staff presented a Proposed Tucson Water Service Area Map depicting areas of proposed water service expansion beyond the current obligated water service area. The Mayor and Council directed that a 30-day comment period be provided to allow for additional public input. This policy was also discussed by the Citizen's Water Advisory Committee (CWAC) at their June 2, 2010 meeting. Time has been set aside at today's Study Session to review the public comments received along with CWAC's recommendation, and to discuss next steps toward formalizing a Tucson Water Service Area Policy.

**City Manager's Office Recommendation** – The Mayor and Council is respectfully requested to provide direction to staff on the proposed Tucson Water Service Area Policy as described in this memorandum.

Upon direction to formalize this policy, staff will return with a resolution for adoption by the Governing Body. It is recommended that the resolution incorporate annual review of the policy to allow the Mayor and Council to consider refinements that may be appropriate within the context of the then current "Water Checkbook" balance and other water resource, financial, annexation, and development issues that could impact this policy.

**Background, Description & Analysis of Proposed Policy** – Please see the April 13, 2010 Mayor and Council Memorandum, "Discussion of Refinements to Water Service Area" (enclosed as Attachment F) for background on this item and a description and analysis of the Proposed Tucson Water Service Area Policy.

The proposed policy is illustrated by the conceptual "Proposed Tucson Water Service Area" map (Attachment A), which depicts recommendations for water service expansion by sub-region surrounding Tucson Water's current Obligated Service Area. That Obligated Service Area includes areas currently served by Tucson Water (dark blue on map) and those undeveloped areas the utility is required by contract or law to serve (light blue, blue hatch on map), which includes vacant land within the Tucson City limits. In total, Tucson Water's current Obligated Service Area covers about 410 square miles and includes approximately 740,000 people (customers of Tucson Water).

Areas outside of the Obligated Service Area are shown on the map in four colors, reflecting whether water service would be considered for extension based on (1) required annexation (or pre-annexation) to the City (pink on map), (2) possible annexation to the City, based on a case by case review by the City of the merits and feasibility of such annexation (pink hatch on map), (3) areas where water service would not be extended in unincorporated Pima County (yellow on map), and (4) areas belonging to other municipalities, private water companies, and tribal lands (grey on map). In both the grey and yellow areas, where Tucson Water has infrastructure in

place, the utility would be willing to discuss agreements to “wheel” renewable supplies of other providers to these areas.

**Collectively, the pink and pink hatch areas of the map are considered Tucson Water’s proposed “Expansion Area” under this proposed Water Service Area Policy.**

**CWAC Recommendation** – On June 2, 2010, staff briefed the Citizens’ Water Advisory Committee (CWAC) on the proposed Tucson Water Service Area Policy contained in this memorandum. After hearing the staff presentation and following a question and answer period, CWAC voted 8-0 (with one abstention) to support the proposed Tucson Water Service Area Policy. The factors that CWAC members considered during their discussion were:

- (1) the policy establishes a framework for establishing Tucson Water’s relationships with respect to other jurisdictions and tribal areas;
- (2) the policy protects environmentally sensitive areas, such as Tanque Verde Creek, by providing the opportunity for delivery of renewable water supplies to those areas to replace groundwater pumping;
- (3) the policy establishes rational requirements for Pre-Annexation and Development Agreements, as well as the subsequent annexation of specific area based on cost benefit to the City;
- (4) the volume of water needed to serve the expansion areas can be accommodated within Tucson Water’s current water supplies and per capita demands; and
- (5) the policy will be revisited annually as part of the Water Checkbook updating process, and can be modified to accommodate changing patterns of growth and development, water usage, and water availability well in advance of a potential water supply shortfall.

**Summary of Public Comments & Response from Staff** – Per Mayor and Council direction at the April 13, 2010 Council Meeting, a media release was distributed announcing a 30-day public comment period on the proposed Tucson Water Service Area. The notification was also sent to the 1,000 person e-mail contact list developed for the City/County Water and Wastewater Study and posted to the Tucson Water and the Study websites.

Written comments were received from 14 individuals and groups, which are enclosed as Attachment E. An itemized summary of the comments and responses from staff to each comment are enclosed in Attachment D. The following is a high level summary of the feedback received and staff’s response from Attachment D.

*1. Comments Related to Water Service Area Boundary*

While one comment was received expressing support for the proposed boundary for water service extension, the majority of comments supported either extensions further than what is proposed or no extension at all:

- Some comments suggested that the boundary be extended further to the southwest and to the northwest.

These areas were excluded from the proposed Expansion Area as they are not likely to ever be within the City of Tucson: they are located some distance outside of the City limits, and in many cases located closer to another jurisdiction or private water provider who could provide water service. In the areas where no water service extension is recommended, but where Tucson Water has some existing water service in place (such as in the northwest and the southwest), Tucson Water would be willing to partner with other water providers in those areas to perhaps develop “wheeling” agreements or consider future sale or transfer of water infrastructure.

- Other comments suggested that the water service boundary should not be extended at this time due to concerns about water supply, energy, Colorado River uncertainty, impacts of new supplies, growth and infrastructure issues, sensitive lands, and concern the process is moving too quickly, among others.

Clearly, these issues are important to consider when expanding the water service area. These issues are not static and subject to permanent resolution but must be continually examined and addressed in an ongoing, iterative way as new information becomes available. Staff recommends using CWAC’s Technical, Planning & Policy Subcommittee and the Water Checkbook process, as well as the ongoing phases of the City-County Water & Wastewater Study, as the iterative process to address these issues.

## *2. Comments Related to Water Service within Other Jurisdictions*

There were comments expressing support for the recommendation to enter into wheeling agreements and/or storage credit transfers with other jurisdictions, which staff is recommending as part of the proposed policy. In addition, comments from the Pasqua Yaqui Tribe requested that the Tribe be involved in future stakeholder discussions. Staff agrees and is proposing this as part of the next steps described at the end of this memorandum.

## *3. Comments Related to Annexation*

A few comments suggested that annexation should be made optional, rather than required, to receive Tucson Water service, as annexation may not be feasible or cost-effective. In situations where proposed developments had previously received a water assurance letter from Tucson Water, but the letter had expired (timed out) due to lack of progress on the development, it was suggested that the City honor its prior water service commitment to these parcels *without* requiring annexation. Some additional concerns about annexation were raised that are addressed in Attachment D.

- Staff believes the City needs to pursue any and all tools available to encourage annexation for a simple reason: the community benefits financially if more areas are located within incorporated jurisdictions. When development occurs in unincorporated areas adjacent to but outside City limits, the region does not receive the full range of revenues needed to pay for the public services that the new development will require (these forgone revenues include sales tax, construction sales tax, state shared revenue and additional property tax, that in total amount to at least \$100 million lost from the region's tax base). Not requiring annexation, or allowing individual property owners to opt-out of annexation, continues to perpetuate this situation.

**Water Supply and Future Demand** – Projecting future population and future water demand is challenging because of the many uncertainties that exist, however these are clearly important factors to consider in extending the water service area. The following sections discuss available water supplies (the Water Checkbook), projections of population growth, and potential water demand in the Expansion Area.

#### *Water Checkbook Balance*

In June 2008, the Mayor and Council directed staff to create a Water Checkbook that would show the amount of renewable potable water and effluent (reclaimed water) supplies available to support future development in Tucson Water's service area. The checkbook "balance" is reported to the Mayor and Council annually in June. This year's checkbook update, provided to the Governing Body on June 9, 2010, reported that the available potable water balance after 2009 was increasing, while the effluent checkbook balance was decreasing:

- **Potable Checkbook Balance** – The City's available potable water checkbook balance following 2009 is actually about 8,450 acre-feet (AF) higher than the balance for 2008 (a 24% increase), primarily because in 2009 a much smaller amount of potable water needed to be held in reserve for development projects because of the slowdown in the construction industry (see Figure 1 on Attachment B).
- **Effluent Checkbook Balance** – The City's available effluent water checkbook balance after 2009 is approximately 3,100 AF lower than after 2008 (a 17% decrease) due to (1) increased reclaimed water usage in 2009 and (2) a somewhat smaller volume of effluent available in 2009 (see Figure 2 on Attachment B).

#### *Projecting Population Growth in Current Obligated Service Area and Proposed Expansion Area*

In projecting future population, three different GIS models were used to estimate the projected number of people Tucson Water may be required to serve in the proposed Expansion Area. Those models were (1) PAG's Traffic Analysis Zone (TAZ) model, (2) a model prepared by Stantec consulting in conjunction with staff for the City-County Water & Wastewater Study, and (3) a zoning-based model that looked at the population density that might be expected given the

current zoning of now vacant parcels (see Attachment C for a fuller explanation of these models and their resulting population projections). The results of the analysis are as follows:

- Currently, Tucson Water serves approximately 740,000 people in its Obligated Area.
- The GIS models predict that Tucson Water will be required to serve an additional 221,000 – 515,000 people in its current Obligated Area as vacant land within the City develops, such as the State land on South Houghton Road.
- The models project that 27,000 - 50,000 additional people may be located in the proposed Expansion Area. Relative to Tucson Water's entire potential customer base in the Obligated Service Area, the Expansion Area represents a 3%-6% increase in the future number of residents to be served by Tucson Water.

*Potential Water Demand in the Expansion Area*

Using a gallons per capita per day (GPCD) rate of 160, which is the recent average (combining commercial and residential usage), the proposed Expansion Area could potentially require 4,800 – 9,000 acre feet (AF) of water per year, or 3%-6% of Tucson Water's total current potable supply portfolio. It is noted that per capita consumption continues to show a downward trend and is likely to drop further as the City's rainwater and gray water ordinances are implemented, and as the community builds out with more water-efficient development patterns and building standards. The iterative process of tracking water usage through the Water Checkbook and other mechanisms will allow Tucson Water to adapt to these variations before a crisis occurs.

**Policy Considerations** – Staff believes the proposed Water Service Area Policy is a reasonable approach to pursue at this time. It establishes a middle ground between the historical practice of extending water service throughout the region based on developer requests, and the current interim obligated area policy that virtually limits all extension of water service until a rational growth policy is developed.

An important aspect of the proposed policy is that it would be subject to annual review by the Mayor and Council. It is recommended that the policy and Water Service Area be reviewed at the same time the City's Water Checkbook is brought forward to the Council. Available water resources would be one factor, among others – including growth patterns, economic trends, water usage trends, environmental concerns, and stakeholder input – that the Mayor and Council could take into account in considering refinements to the Water Service Area policy.

The proposed policy establishes the City's future area of interest that will help long range planning, the General Plan update, infrastructure planning, and the City's annexation strategy. The proposed policy benefits Tucson Water from a business perspective in that it aids in better water infrastructure and supply planning, informs Tucson Water's efforts to obtain future water supplies, and assists with updating cost of growth models. It will smooth Tucson Water's

service area boundaries, which helps service delivery and clearly communicates the boundaries of that water service.

The proposed policy benefits property owners by providing more certainty about Tucson Water's service area. It dedicates water for economic purposes in areas likely to generate quality jobs. It benefits other water providers by defining Tucson Water's service boundary and establishing a policy for wheeling agreements designed to deliver more renewable resources and eliminate wells in environmentally sensitive areas.

The impact on water resources to serve the proposed expansion area is not significant when considered within the context of Tucson Water's entire water portfolio and customer base within its current Obligated Service area. A proportionate share of the cost of any new water resources that may be acquired will be charged to new customers, so extension areas will pay their way when it comes to required water resources.

**Next Steps** –

1. Upon endorsement of the proposed Tucson Water Service Area policy by the Mayor and Council, staff will prepare a resolution for adoption that formalizes the policy and also includes an annual review of the policy when the Water Checkbook balance is updated.
2. Upon adoption of the policy by resolution, an appropriate next step would be for the jurisdictions and water providers in areas that fall *outside* of the service area to come together to address comprehensive water planning within sub-regions, including the possibility of wheeling and water credit agreements. These discussions would include Metro Water, the Pasqua Yaqui Tribe, Oro Valley, Marana, Vail Water Co., and Pima County, among others. This coincides with recommendations 3.1 and 3.2 in the comprehensive planning section of the City/County Water and Wastewater Study.
3. Another next step after policy adoption would be to begin discussions with the County on how the City and County can work together in a collaborative fashion in areas where the City is proposing to pursue annexation. In the past, the City and County have had disagreements over specific annexations including such issues as which jurisdiction will review development plans, how public services and infrastructure should be provided, and how impact fees will be used. Staff recommends these issues should ideally be discussed and addressed in an agreement between the City and County ahead of specific annexations and development pressure. This is consistent with the recommendations for sustainable growth as set forth in the City/County Water and Wastewater Study.
4. Finally, as discussed in the April 13 Mayor and Council materials, after adoption of the Water Service Policy, the existing appeals board (consisting of a representative of the City Manager's Office, the City Attorney, and the Director of Housing and Community Development) will continue to function to hear appeals from property owners who feel

Tucson Water made an incorrect determination regarding denial of water service extension because the property is not in the approved Expansion Area.

Staff will also provide the Mayor and Council with information about any proposed projects that might provide a large-scale economic opportunity for the region but that lie *outside* of the Expansion Area, so that the Council may adjust the Water Service Policy as necessary so as not to impair the region's ability to attract significant economic developments. In those situations, the Council might consider providing water service through wheeling or direct service arrangements.

Respectfully submitted,



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City Manager

ML:JB:NEG/JT

- Attachments:
- A. Proposed Tucson Water Service Area (map)
  - B. Tucson's Potable and Effluent "Water Checkbook" Balances (figures)
  - C. 3 Population Projection Models and Results
  - D. Summary of Public Comments and Response from Staff
  - E. Individual Public Comments
  - F. April 13, 2010 Mayor and Council Memorandum, "Discussion of Refinements to Water Service Area"